AUSTRALIAN JOURNAL

OF ZOOLOGY QL 1 A865

VOLUME 1

MELBOURNE 1953



9 L A 93 V. 1 1953 C. 3

WITHORAUM

AUSTRALIAN JOURNAL OF ZOOLOGY

Published by the Commonwealth Scientific and Industrial Research Organization, in collaboration with the Australian National Research Council, and under the general direction of the Editorial Board (Dr. N. S. Noble (Chairman), Professor Sir Macfarlane Burnet, Professor E. J. Hartung, Professor L. H. Martin, and Professor J. G. Wood). A medium for the publication of results of original scientific research in zoology with special emphasis on the descriptive phases.

Issued as material becomes available, 7/6 per issue

EDITORIAL ADVISORY COMMITTEE

Chairman and Editor: Dr. N. S. Noble

Members: Dr. H. G. Andrewartha

Dr. A. J. Nicholson Mr. F. N. Ratcliffe

Professor W. Stephenson Professor H. Waring

All enquiries and manuscripts should be forwarded to:

The Editor,
Australian Journal of Zoology,

Commonwealth Scientific and Industrial Research Organization, 314 Albert Street, East Melbourne, C.2, Victoria.



Number 1, January 1953

| | PAGE |
|---|------|
| The Ecology of Chrysomela gemellata Rossi and C. hyperici Forst., and Their Effect on St. John's Wort in the Bright District, Victoria. By L. R. Clark | 1 |
| An Analysis of the Outbreaks of the Australian Plague Locust, Chortoicetes terminifera (Walker), during the Seasons 1940-41 to 1944-45. By L. R. Clark | 70 |
| Observations on the Biology of $Lyctus\ brunneus$ (Steph.). By F. J. Gay | 102 |
| The Australian Species of Aponomma and Amblyomma (Ixodoidea). By F. H. S. Roberts | 111 |
| 2 1 1070 | |
| Number 2, July 1953 | |
| The Statistical Analysis of the Canadian Lynx Cycle. I. Structure and Prediction. By P. A. P. Moran | |
| The Lotka-Volterra Theory of Interspecific Competition. By H. G. Andrewartha and L. C. Birch | |
| Some Aspects of the Biology of the Mound Ant Iridomyrmex detectus (Smith). By A. H. Duncan-Weatherley | |
| The Paramphistomes (Trematoda) of Australian Ruminants. II. The Life History of Ceylonocotyle streptocoelium (Fischoeder) Näsmark and of Paramphistomum ichikawai Fukui. By P. H. Durie | |
| The Differentiation of the Infective Larvae of Some Common Nematode Parasites of Cattle. By R. K. Keith | 222 |
| A New Species of Oribateid Mite from Queensland. By Marie Hammer | 236 |
| Zygoribatula longiporosa Hammer (Oribatei : Acarina), An Intermediate Host of Moniezia benedeni (Moniez) (Anoplocephalidae : Cestoda) in Australia. By F. H. S. Roberts | |
| A Review of Australian Nemestrinidae (Diptera). By S. J. Paramonov | 242 |

Number 3, December 1953

| | PAGE |
|--|------|
| The Statistical Analysis of the Canadian Lynx Cycle. II. Synchronization and Meteorology. By P. A. P. Moran | 291 |
| The Occurrence and Significance of the Peritrophic Membrane, with Special Reference to Adult Lepidoptera and Diptera. By D. F. Waterhouse | |
| The Australian Species of <i>Heliothis</i> (Lepidoptera: Noctuidae) and Their Pest Status. By I. F. B. Common | |
| Observations on the Sensory Physiology and Behaviour of Larvae of the Cattle Tick, Boophilus microplus (Can.) (Ixodidae). By P. R. Wilkinson | |
| The Australian Psychodidae (Diptera), Part I. By G. H. Satchell | 357 |
| The Australian Psychodidae (Diptera), Part II. By the Late A. L. Tonnoir | 419 |
| A Review of Australian Apioceridae (Diptera). By S. J. Paramonov | 449 |
| Index to Volume 1 | 590 |